

### Abstract of the Disclosure

The present invention relates to a resistance calibration circuit to correct a resistance variation in an output terminal of a semiconductor device. The resistance calibration circuit according to the present invention includes: a correction code generator for generating a plurality of push-up code signals and a plurality of pull-down code signals based on an external reference resistor, wherein a reference voltage is applied to the correction code generator; a push-up decoder for decoding the plurality of push-up code signals from the correction code generator; a pull-down decoder for decoding the plurality of pull-down code signals from the correction code generator; and a resistance adjustor for receiving a push-up signal from the push-up decoder and a pull-down signal from the pull-down decoder and for turning on/off a plurality of inner transistors.